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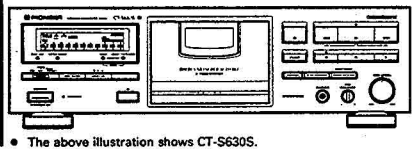
The Art of Entertainment

Service Manual



• The above illustration shows CT-S630S.

ORDER NO.
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The chapter 1 of this Service Manual will not be reprinted. On your additional orders, we may supply only the chapter 2. For the chapter 1, please make copies and attach to the chapter 2 at your side if necessary.

STEREO CASSETTE DECK

CT-S630S
CT-S630S-G
CT-S530

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model			Power Requirement	The voltage can be converted by the following method.
	CT-S630S	CT-S630S-G	CT-S530		
HEM	○	○	○	AC220 – 230V	AC230 – 240V, *
HB	○	–	–	AC230 – 240V	AC220 – 230V, *

* : Alter the wiring of the Power-supply block at the primary winding of power transformer referring to the "Line Voltage Selection" described in Service Manual.

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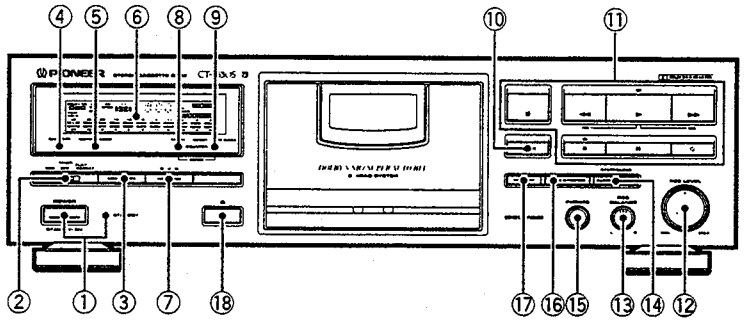
CHAPTER 1

1.1 PANEL FACILITIES



• The above illustration shows CT-S630S.

① POWER STANDBY/ON switch and STANDBY indicator
The POWER switch activates the secondary transformer only. Even when the switch is in the STANDBY position, there will be a power flow to the deck's circuits as long as the power cord is connected to a power outlet.

② TIMER mode/repeat play switch (TIMER REC/OFF/PLAY-REPEAT)

③ MPX FILTER button

④ Display off button (DISP OFF)
Press to select the function display on or off.

⑤ Level meter range selector button (METER RANGE)
Press to select wide or expanded range on the level meter.

⑥ Function display

⑦ Dolby* NR button (DOLBY NR OFF/B/C/S (CT-S630S))
Dolby* NR button (DOLBY OFF/B/C (CT-S530))

*
- *Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.*
- *"DOLBY", the double-D symbol ⧈ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.*

⑧ Tape counter mode button (COUNTER MODE)

⑨ Counter reset/tape capacity selector button (COUNTER RESET/TAPE CAPA)

⑩ FLEX button

⑪ Operation buttons
- ◀◀/MS : Rewind/music search
- ■ : Stop
- ▶ : When pressed during stop, begins playback.
- ▶▶/MS : Fast forward/music search
- ● : Recording
- ❚❚ : When pressed during playback or recording, pauses playback or recording. When pressed during pause, resumes play or starts recording.
- O : Recording mute

⑫ Recording level control (REC LEVEL)

⑬ Recording balance control (REC BALANCE)

⑭ SUPER AUTO BLE START/CLEAR button

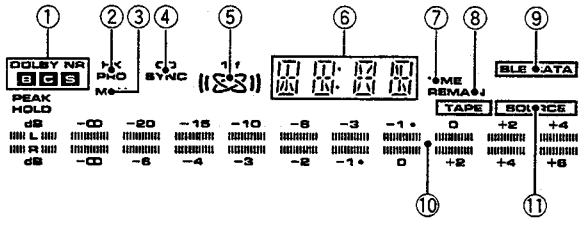
⑮ Headphones jack (PHONES)

⑯ CD · DECK SYNCHRO recording button (CD SYNCHRO)

⑰ Monitor selector button (MONITOR)
Used to monitor the source sound or the actual recorded sound source during recording.
- When the unit is set to record or playback mode, the TAPE indicator lights up and the monitor mode is automatically selected.

⑱ Eject button (⏏)
- If the tape is moving (recording, playback, tape winding, etc.), press the stop (■) button before pressing this button.

FUNCTION DISPLAY



●The above illustration shows CT-S630S.

① DOLBY NR B/C/S indicator (CT-S630S)
DOLBY NR B/C indicator (CT-S530)

② DOLBY HX PRO indicator

③ MPX indicator

This indicator lights when the MPX filter button is set to ON (only when DOLBY NR is also set to ON).

④ CD SYNC indicator

Lights when synchro recording from a CD player is being carried out.

⑤ FLEX (1/f) indicator (1/f ⋈)

⋈ indicator lights when the FLEX button is pressed.

⑥ Counter indicator

Normally the tape or time counter is displayed as a number (see "COUNTER MODES").
The indicator flashes for approximately 4 seconds when the power is connected to the power supply.
During AUTO BLE tuning, indicates STRT, BIAS, LEVL, EQ, TUNE or Err.

⑦ TIME counter indicator

Lights up in the time counter mode.

⑧ REMAIN counter indicator

Lights up in the remaining time counter mode.

⑨ BLE DATA indicator

⑩ Level meter with peak hold function

The □□ beside the −1 dB mark indicates the Dolby NR system's reference level.

Meter range:
Wide mode: −20 dB to +4 dB
Expand mode: −6 dB to +6 dB

⑪ Monitor source indicators

TAPE: Recorded sound
SOURCE: Original source sound

1.2 SPECIFICATIONS

System ..... 4-track, 2-channel stereo
Heads. Combined "Hard Permalloy" recording/playback head × 1
"Ferrite" erasing head × 1
Motor ..... DC servo capstan motor × 1
DC reel motor × 1
Wow and Flutter ..... No more than 0.05% (WRMS, JIS)
No more than ±0.14% (DIN)
Fast Winding Time ..... Approx. 90 seconds (C-60 tape)
Frequency Response (at −20 dB recording level)
TYPE IV (Metal) tape ..... 20 to 21,000 Hz (±6 dB)
TYPE II (CrO_2) Tape ..... 20 to 19,000 Hz (±6 dB)
TYPE I (Normal) Tape ..... 20 to 19,000 Hz (±6 dB)
Signal-to-Noise Ratio (Dolby NR OFF) ..... More than 59 dB
Noise Reduction Effect
Dolby B-type NR ON ..... More than 10 dB (at 5 kHz)
Dolby C-type NR ON ..... More than 19 dB (at 5 kHz)
Dolby S-type NR ON ..... More than 22 dB (at 5 kHz)
Harmonic Distortion ..... No more than 0.6%
(at −4 dB: 160 nwb/m)
Input (Sensitivity)
LINE (INPUT) ..... 100 mV (Input impedance 72 kΩ)
Output (Reference level)
LINE (OUTPUT) ..... 0.5 V (Output impedance 2.2 kΩ)
Headphones (PHONES) ..... 1.41 mW (Load impedance 32 Ω)

Miscellaneous

Power requirements
U.K., model ..... AC 230—240 Volts~, 50/60 Hz
European model ..... AC 220—230 Volts~, 50/60 Hz
Power consumption
CT-S630S ..... 25 W
CT-S530 ..... 21 W
Dimensions ..... 420 (W)×125 (H)×280 (D) mm
Weight ..... 4.1 kg (European model)
4.4 kg (U.K. model only)

Subfunctions

- DOLBY B-type, C-type and S-type NR Systems (CT-S630S)
- DOLBY B-type and C-type NR Systems (CT-S530)
- DOLBY HX PRO system
- MPX FILTER
- Headphones jack
- 4-digit electronic tape/time/remain counter
- Music search up to ±15 selections
- Automatic space recording mute
- SUPER AUTO BLE tuning system
- FL level meter 9 +1 segments (with peak hold)
- SR System remote control available
- CD · DECK SYNCHRO function
- Timer Recording/Playback (Automatic repeat playback ON)
- Auto tape selector
- FLEX system
- Last memory

Accessories

Operating instructions 1
Connection cord with pin plugs 2
SR Remote control cord 1
CD · DECK SYNCHRO control cord 1

NOTE:
Specifications and design subject to possible modifications without notice, due to improvements.

1.3 IC INFORMATION

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

1. PD4443A (IC701)

System Control (CPU)

● Pin Function

Pin No.	Pin Name	Functions
1	P04	FL segment output (*1) A/D 5-bit level scan output (*2) Key scan output (*3)
2	P03	
3	P02	
4	P01	
5	XPOFF	POWER OFF detection ┐L (L: EDGE)
6	FIN	Level scan input for the 1/f high frequency level
7	POWER	POWER KEY input detection ┐L (L: EDGE)
8	SENT	TAKE-UP side reel sense input. For the auto stop electronic counter
9	SENS	Supply side reel sense input. For measuring the remain counter.
10	XREM	Remote control unit input
11	LMET	Lch level scan input
12	RMET	Rch level scan input
13	KEY0	4-bit key scan input (L: EDGE)
14	KEY1	
15	KEY2	
16	KEY3	
17	BIAS	Bias oscillation drive. H: ON
18	SYNC	CD-SYNCHRO code in detection. L: IN
19	FRCD	CONT to CD (for CD-SYNCHRO) INPUT
20	MTRS	Meter amplifier gain selection.
21	DAT0	Data input from the memory IC (NM93C46N).
22	DAT1	Data output to NM93C46N and LC7570.
23	SCK	Clock for communicating with NM93C46N and LC7570
24	CS	Chip select for communicating with NM93C46N
25	WR	Data latch for communicating with LC7570
26	XBLK	L CONT of all outputs of LC7570
27	XLMU	LINE MUTE. L: ON
28	XRMU	REC MUTE. L: ON
29	OSC	TEST signal output for the auto BLE (400 Hz, 3 kHz, 15 kHz)
30	—	Clock input for the CPU (4.19 MHz)
31	—	
32	GND	To GNDC

Pin No.	Pin Name	Function
33	—	To GNDC
34	—	Non connection
35	MC2	Motor CONTs for the door and reel
36	MC0	
37	RMPL	Reel motor PLAY torque selection. H: ON
38	CPM	Mechanism capstan motor driving. H: ON
39	XRESET	For resetting the CPU. L: Resetting
40	G01	Output for the FL grid
41	G02	
42	G03	
43	G04	
44	G05	
45	G06	
46	G07	
47	G08	
48	G09	
49	G10	
50	STBY	LED driving for the POWER STANDBY. H: ON
51	SDLA	Solenoid driving for the mechanism. H: ON
52	MC1	Motor CONTs for the door and reel
53	NRS0	1 bit of the 2-bit Dolby NR selection
54	P12	FL segment (*1)
55	P11	
56	V_{LOAD}	For FL. V_F
57	V_{PRE}	CPU internal FL output buffer power supply (Approx. –4V)
58	P10	FL segment output (*1)
59	P09	
60	P08	FL segment output (*1) Key scan output (*3)
61	P07	
62	P06	
63	P05	FL segment output (*1) Level scan (*2) Key scan output (*3)
64	Vcc	To Vcc +5V

*1: To the FL
*2: To the anodes D541 to D545
*3: To each key and SW

1.5 ADJUSTMENTS

1. MECHANICAL ADJUSTMENT

1. Tape Speed Adjustment			
Mode	Test tape	Adjustment position	Specification rating (playback frequency)
PLAY	Play the STD–301 tape (3kHz)	Tape speed adjustment hole	3000Hz ± 5Hz

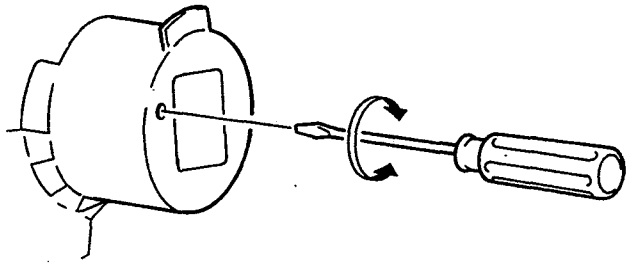
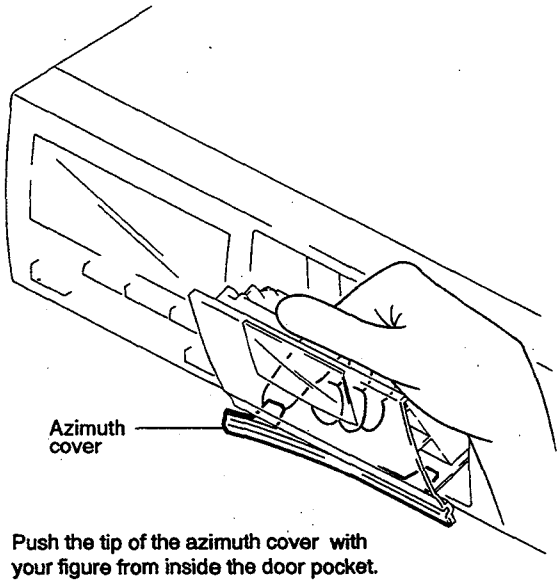


Fig. 1 Tape speed adjustment

● Before performing the head azimuth adjustment

Remove the azimuth cover before performing this adjustment.

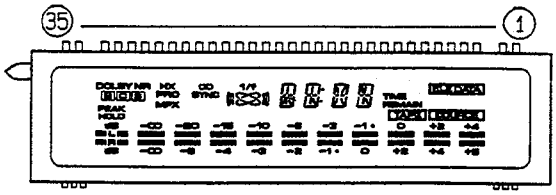


Push the tip of the azimuth cover with your figure from inside the door pocket.

Fig. 2 Removal of Azimuth Cover

1.4 FL INFORMATION

● V1501(RAW1133)



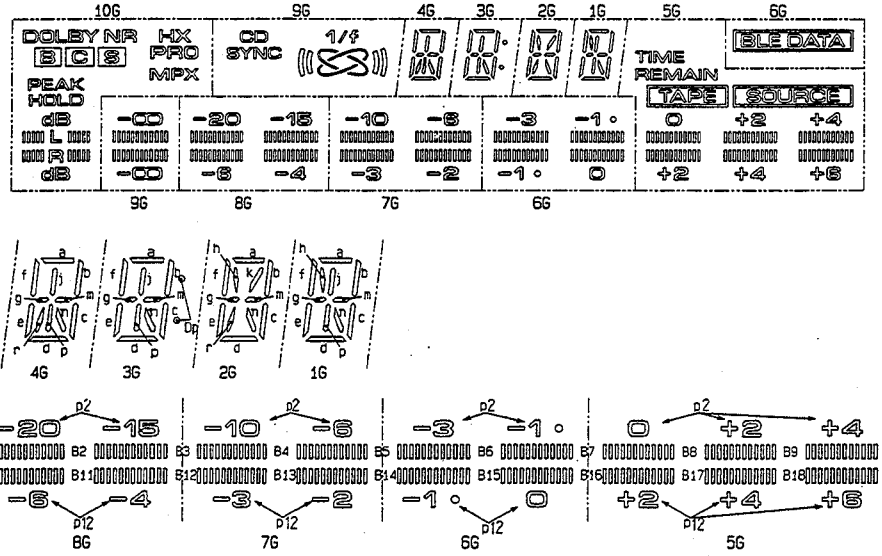
Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Assignment	F	F	NP	NC	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	NC	P12	P13	NC	P11

Pin No.	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Assignment	NC	P10	NC	P9	P8	P7	P6	P5	NC	P4	P3	P2	P1	NP	F	F

F:Filament G1~G10:Grid P1~P13:Anode NP:No pin NC:No connection

Grid Assignment



Anode Connection

	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1
P1			B1	B3	B5	B7	a	a	a	a
P2	HOLD	CD SYNC	B10	B12	B14	B16	b	b	b	b
P3	PEAK		B2	B4	B6	B8	f	f	f	f
P4	HX PRO	1/f	B11	B13	B15	B17	g	g	g	g
P5	MPX	( )	-6 -4	-3 -2	-1 ◦ 0	+2 +4 +6	m	m	m	m
P6	B	( )	-20 -15	-10 -6	-3 -1 ◦	0 +2 +4	c	c	c	c
P7	C					B9	e	e	e	e
P8	S					B18	d	d	d	d
P9	DOLBY NR					REMAIN	j, p	j, p	h	j, p
P10						TIME	r	Dp	n	h
P11						SOURCE	n	n	r, k	n
P12						TAPE				
P13					BLE DATA					

PLAYBACK SECTION

1. Head Azimuth Adjustment

- Turn VR101, 102 to mechanical center positions.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 10 kHz/–20 dB section of STD–331E test tape.	Head azimuth adjustment screw. (See Fig. 4)	LINE OUT	Maximum playback signal level.	
2.	STOP	Lock the screw with screw lock after completing adjustment.				

2. Playback Level Adjustment

- This adjustment determines the DOLBY NR level, and must be performed with great care.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 315 Hz/0 dB section of the STD–331E test tape.	Deck	VR101 (Lch) VR102 (Rch)	TP. 3 (Lch) TP. 4 (Rch)	–7.2 dBV	

RECORDING SECTION

1. Bias Oscillator Adjustment

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC	Load the STD–610 test tape with no input signal.	Deck	L622	TP. 11	106 kHz ± 0.3 kHz	

2. Recording Bias Adjustment

- Turn the DOLBY NR switch is OFF.
- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC/ PAUSE	Apply a 315 Hz and 10 kHz signal to the line input terminals, load the STD-631 or STD-632 test tape.	REC level control volume		LINE OUT	– 28 dBV	
2.	REC	Record the above signal onto the STD-631 or STD-632 test tape, and playback	Deck	VR601 (Lch) VR602 (Rch)		Repeatedly record, playback and adjust so that the playback level of 10 kHz signal becomes 0 dB ± 0.5 dB when compared with the 315 Hz signal.	

3. Recording Level Adjustment

- Turn the DOLBY NR switch is OFF.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC/ PAUSE	Apply a 315 Hz signal to the line input terminals, load the STD–631 or STD–632 test tape.	REC level control volume		LINE OUT	–10.0 dBV	
2.	REC/ PLAY	Record the above signal onto the STD–631 or STD–632 test tape, and playback.	Deck	VR551 (Lch) VR552 (Rch)	TP. 3 (Lch) TP. 4 (Rch)	Repeatedly record, playback and adjust so that the playback signal level becomes –11.2 dBV.	
3.	REC/ PLAY	Record the above signal onto the STD–621 test tape, and playback.	Check		TP. 3 (Lch) TP. 4 (Rch)	–11.2 dBV ± 1.5 dB	
4.	REC/ PLAY	Record the above signal onto the STD–610 test tape, and playback.	Check		TP. 3 (Lch) TP. 4 (Rch)	–11.2 dBV ± 1.5 dB	

2. ELECTRICAL ADJUSTMENTS

Adjustment Conditions

1. The mechanical adjustments must be completed first.
2. The head must be cleaned and demagnetized.
3. Turn power on allow the deck to warm up for at least a few minutes before commencing any electrical adjustments.
4. The reference signal is 0 dBV=1 Vrms.
5. Connect a 10 kΩ load resistance to the OUTPUT terminals.
6. Unless otherwise specified, the switches listed below are left in the positions indicated.
   DOLBY NR : OFF
   TAPE SELECTOR : NORM

Test Tapes

STD–331E	: Playback adjustments (See Fig. 3)
STD–631 or STD–632	: NORMAL blank tape
STD–621	: CrO2 blank tape
STD–610	: METAL blank tape

* As the reference recording level is 250 nwb/m for STD–331E, the recording level will be higher by 4 dB for STD–331B (160 nwb/m). When adjusting, pay carefull attention to the type of tape used.

List of Adjustments

Playback sections

1. Head azimuth adjustment.
2. Playback level adjustment.

Recording sections

1. Bias oscillator adjustment.
2. Recording bias adjustment.
3. Recording level adjustment.
4. AUTO BLE adjustment

NOTE: This unit has an automatic tape selection feature.

HX Pro headroom extension originated by Bang & Olufsen and manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY", the double-D symbol ◻◻, and "HX PRO" are trademarks of Doldy Laboratories Licensing Corporation.

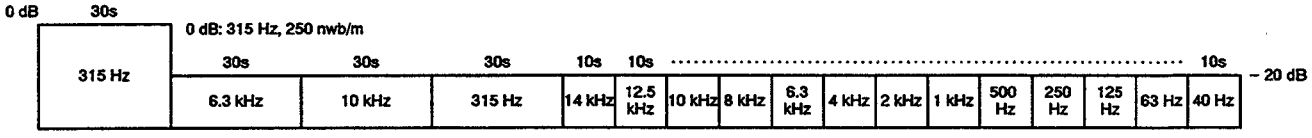


Fig. 3 Constants of the test tape STD–331E

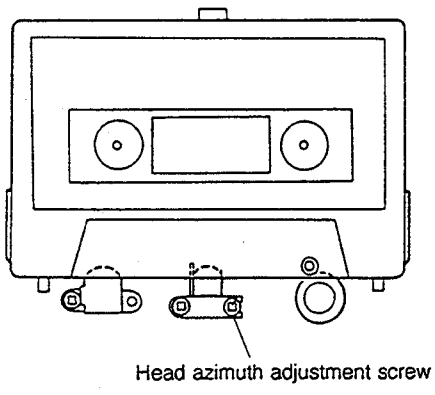


Fig. 4 Head azimuth adjustment

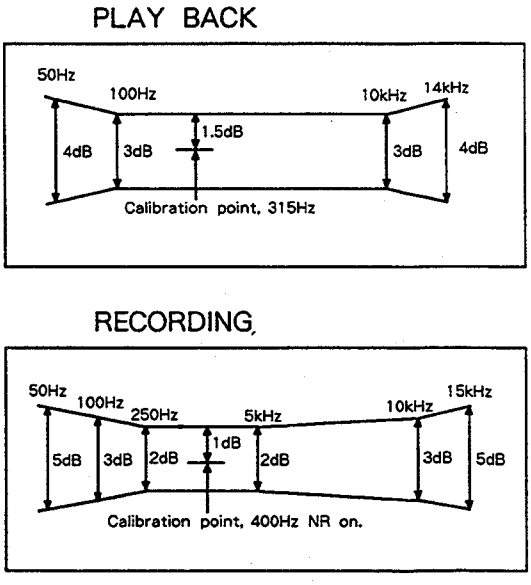


Fig. 5 Frequency response zone

4. AUTO BLE Adjustment

- BLE adjustment should be performed after all other adjustments are completed.
- This adjustment should be performed in the test mode.
- Entering the Test Mode.
  Turn on the power, and after more than 4 seconds, press the "COUNTER RESET" button, "COUNTER MODE" button and ▮▮ (PAUSE) button simultaneously.
- Releasing the Test Mode.
  Press the "COUNTER RESET" button.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	–	Set to test mode.	–	–	–	
2.		Press the AUTO BLE key on the front panel.	VR401	Level meter Rch	Adjust the Lch segment which is lit until Rch is not lighting up. → Lch ■□ Rch ■■□■■ (■: light up □: not light up)	400 Hz adjustment (FL indication 1)
3.		Press the AUTO BLE key on the front panel.	VR402			3 kHz adjustment (FL indication 2)
4.		Press the AUTO BLE key on the front panel.	VR403			15 kHz adjustment (FL indication 3)

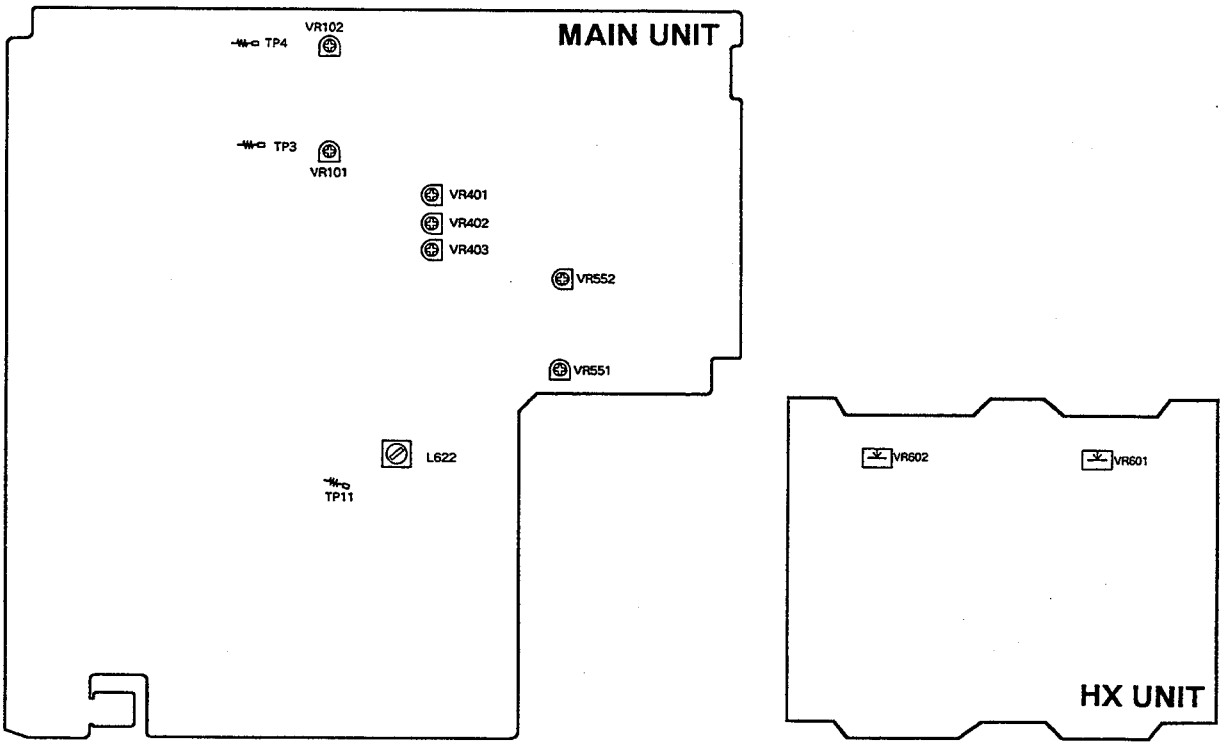


Fig. 6 Adjusting points

1.6 PARTS LIST FOR EXPLODED VIEWS AND PACKING

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

1. EXTERIOR AND PACKING

● PACKING

Contrast of CT-S630S/HEM, CT-S630S/HB, CT-S630S-G/HEM and CT-S530/HEM

CT-S630S/HEM, CT-S630S/HB, CT-S630S-G/HEM and CT-S530/HEM and have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.				Remarks
			CT-S630S/ HEM	CT-S630S/ HB	CT-S630S-G/ HEM	CT-S530/HEM	
	3	Packing case	RHG1566	RHG1567	RHG1568	RHG1569	
	7	Operating instructions (German/Italian/Dutch/Swedish/ Spanish/Portuguese)	RRD1153	Not used	RRD1153	RRD1153	
	11	Pad spacer A	Not used	RHC1039	Not used	Not used	
	12	Pad spacer B	Not used	RHC1041	Not used	Not used	

• For CT-S630S/HEM

Parts List

Mark	No.	Description	Part No.
	1	Pad (L)	RHA1111
	2	Pad (R)	RHA1112
	3	Packing case	RHG1566
	4	Sheet	RHX – 034
	5	Connection cord assy (For AUDIO)	RDE1036
	6	Control cord (For CD • DECK SYNCHRO)	RDE1038
	7	Operating instructions (German/Italian/Dutch/ Swedish/Spanish/Portuguese)	RRD1153
	8	Operating instructions (English/French)	RRE1103
	9	Spacer A	RHC1044
	10	Cord with mini plug (For SR cord)	PDE1247

2. MECHANISM UNIT

Parts List

Mark	No.	Description	Part No.
	1	Fixed core	RLA1130
	2	Planger	RLA1132
	3	Head (R/P)	RPB1047
	4	Head (E)	RPB1040
	5	Push SW	RSG1018
	6	MTR reel BLK	RXM1057
	7	MTR main BLK	RXM1058
	8	Solenoid BLK	RXP1010
	9	Photo – transistor	SPI33534FG
	10	Main belt	REB1163
	11	Pinch roller ass'y	RXA1183
	12	F/W ass'y	RXA1346
	13	Washer	WA26D045D025
	14	Screw 2.6 × 6.4 ZN	RBA1076
	15	Washer	RBF – 057
	16	Reel base BLK	RXA1184
	17	Idler BLK	RXA1248
	18	.....	
	19	Washer	RBF1038
	20	Azimuth SP	RBH1076
	21	Head base SP	RBL1003
	22	Slide SP	RBH1239
	23	Play arm	RNK1525
	24	Cam gear (3R)	RNK1672
	25	.....	
	26	Lever SP (L) (EJECT)	RBH1262
	27	Eject prevention spring (L)	RBH1234
	28	Spring (CASSETTE)	RBK1048
	29	Lever collar B	RLA1146
	30	Detector lever (REC)	RNK1527
	31	Metal detector lever (L)	RNK1529
	32	Detector lever (P)	RNK1543
	33	.....	
	34	Screw	RBA1101
	35	Plate HD BLK	RXA1488
	36	Screw	PMA26P050FMC
	37	F lock screw	RBA1031
	38	Screw (7.7)	RBA1048
	39	Screw	RBA1078
	40	Washer	WA26D047D050
	41	Washer	YE15FUC
	42	Holder cushion (L)	RED1027
	43	F lock screw	RBA1102
	44	Screw	RBA1068
	45	PCB control BLK	RXA1487
	46	Chassis base BLK	RXA1557
	47	Head base	RNE1390
	48	Head spacer	RNK2106
	49	Eject prevention arm (L)	RNE1199
	50	Lever (L) (EJECT)	RNK1593
	51	Screw	PMZ20P080FMC
	52	Spacer	RLA1275

● EXTERIOR

Contrast of CT-S630S/HEM, CT-S630S/HB, CT-S630S-G/HEM and CT-S530/HEM

CT-S630S/HEM , CT-S630S/HB, CT-S630S-G/HEM and CT-S530/HEM have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.				Remarks
			CT-S630S/HEM	CT-S630S/HB	CT-S630S-G/HEM	CT-S530/HEM	
⚠	2	Power cord with plug	PDG1003	PDG1055	PDG1003	PDG1003	
	4	Name plate	RAM1007	RAM1007	RAM1014	RAM1007	
	7	Azimuth cover	RAH2431	RAH2431	RAH2432	RAH2431	
	9	Main unit	RWZ3221	RWZ3221	RWZ3221	RWZ3282	
	10	DISP unit	RWZ3222	RWZ3222	RWZ3222	RWZ3283	
	11	1/f unit	RWX1092	RWX1092	RWX1092	RWX1086	
	16	VR knob	RAC1707	RAC1707	RAC1708	RAC1707	
	17	Power knob	RAC1809	RAC1809	RAC1912	RAC1809	
	18	Operation knob	RAC1795	RAC1795	RAC1910	RAC1795	
	19	Balance knob	RAC1705	RAC1705	RAC1662	RAC1705	
	20	Mode knob A	RAC1800	RAC1800	RAC1909	RAC1800	
	21	Slide knob	RAC1713	RAC1713	RAC1915	RAC1713	
	26	Dolby S unit	RWX1101	RWX1101	RWX1101	.....	
	28	Door pocket	RAH2440	RAH2440	RAH2441	RAH2442	
	30	Bonnet	REA1077	REA1077	REA1134	REA1077	
	31	Front panel	RAH2428	RAH2428	RAH2429	RAH2430	
	41	Eject knob	RAC1772	RAC1772	RAC1914	RAC1772	
	48	OPSW unit	RWZ3223	RWZ3223	RWZ3223	RWZ3284	
NSP	49	TRN 2 unit	RWZ3225	RWZ3225	RWZ3225	RWZ3286	
NSP	50	TRN 1 unit	RWZ3224	RWZ3224	RWZ3224	RWZ3285	
	52	Rear panel	RNA1830	RNA1831	RNA1832	RNA1833	
	62	Pin cap	Not used	VEC1616	Not used	Not used	
NSP	63	Insect proof plate	Not used	DEC1158	Not used	Not used	
	64	Screw	Not used	Not used	BBZ30P080FCC	Not used	
NSP	65	Earth plate	Not used	Not used	RNE1795	Not used	
⚠	66	Fuse (T5A)	Not used	PEK1003	Not used	Not used	

• For CT-S630S/HEM

Parts List

Mark	No.	Description	Part No.
⚠	1	Strain relief	CM – 22B
⚠	2	Power cord with plug	PDG1003
⚠	3	FU801, FU803 Fuse (T1A)	REK1022
	4	Name plate	RAM1007
⚠	5	Power transformer (T1)	RTT1268
	6	Cord clamper	RNH – 184
	7	Azimuth cover	RAH2431
	8	Half pressure spring	RBK1004
	9	Main unit	RWZ3221
	10	DISP unit	RWZ3222
	11	1/f unit	RWX1092
	12	HX unit	RWX1069
	13	Insulator	PNW1912
	14	Lens S	RNK1911
	15	LED lens	PNW2019
	16	VR knob	RAC1707
	17	Power knob	RAC1809
	18	Operation knob	RAC1795
	19	Balance knob	RAC1705
	20	Mode knob A	RAC1800
	21	Slide knob	RAC1713
	22	Mode knob B	RAC1808
	23	Door lens	RAH2171
	24	.....	
	25	Mechanism unit	RYM1224
	26	Dolby S unit	RWX1101
	27	Remain display paper	REE – 113
	28	Door pocket	RAH2240
	29	FL lens	RAH2291
	30	Bonnet	REA1077

Mark	No.	Description	Part No.
	31	Front panel	RAH2428
	32	Screw	ABZ30P080FMC
	33	Screw	BBZ26P060FMC
	34	Screw	BBZ30P060FZK
	35	Screw	BBZ30P080FMC
	36	.....	
	37	.....	
	38	Screw	IBZ30P150FCU
	39	Lead card 33P	RDD1284
	40	Connector assy 2P	RKP1681
	41	Eject knob	RAC1772
	42	Door spring L	RBH1341
	43	Damper assy	REC1005
	44	Screw	BCZ26P050FMC
	45	Screw	IPZ26P080FMC
	46	Eject spring	RBH1342
	47	Washer	WA52D080D025
	48	OPSW unit	RWZ3223
NSP	49	TRN 2 unit	RWZ3225
NSP	50	TRN 1 unit	RWZ3224
NSP	51	Mechanism bracket	RNE1601
	52	Rear panel	RNA1830
NSP	53	PCB spacer	PNY – 404
NSP	54	Trans shield plate	RNE1451
NSP	55	Main chassis	RNB1090
	56	Connector assembly 4P	RKP1696
	57	Connector assembly 4P	RKP1697
NSP	58	Arm Collar	RLA1124
NSP	59	Eject arm	RNE1597
	60	Screw	BBZ30P040FZK
NSP	61	Binder	Z09 – 058

DISP UNIT

RWZ3222 and RWZ3283 and have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		RWZ3222	RWZ3283	
	D1511	1SS254	Not used	

OPSW UNIT

Although RWZ3223 and RWZ3284 are different in part number, they consist of the same components.

TRN 1 UNIT

Although RWZ3224 and RWZ3285 are different in part number, they consist of the same components.

TRN 2 UNIT

Although RWZ3225 and RWZ3286 are different in part number, they consist of the same components.

• PARTS LIST FOR CT-S630S/HEM

Mark	No.	Description	Part No.
		MAIN UNIT	
		SEMICONDUCTORS	
	IC541		BA10339
	IC161, IC341, IC401, IC501, IC951		BA15218N
	IC551		CXA1198AP
	IC201, IC251		CXA1563S
	IC702		LC7570
	IC101		M5220P
⚠	IC803		NJM7805FA
⚠	IC801		NJM7806FA
⚠	IC805		NJM7812FA
⚠	IC802		NJM7906FA
⚠	IC806		NJM79L12A
	IC703		NM93C46N
	IC701		PD4443A
	IC941		TA7288P
	IC543		TC4050BP
	IC331		TC4052BP
	Q771		2SA1309A
	Q621, Q622		2SC3243
	Q905		2SC3246
	Q181, Q182, Q551, Q552, Q640		2SC3311A
	Q831, Q832, Q835, Q908, Q921		2SC3311A
	Q951, Q952		2SC3311A
	Q906, Q907		2SD1858X
	Q351, Q352, Q557, Q558, Q623		2SD2144S
	Q403		2SK246
	Q172, Q284, Q772, Q834		DTA124ES
	Q101, Q102, Q151, Q152, Q171		DTC124ES
	Q283, Q401, Q402, Q461-Q476		DTC124ES
	Q481, Q482, Q501, Q502		DTC124ES
	Q521, Q522, Q553-Q555		DTC124ES
	Q735-Q738, Q761, Q762, Q833		DTC124ES
	Q851, Q942		DTC124ES
	Q641, Q643		DTC124TS
	D901		11ES2
⚠	D801-D804, D806, D810-D813		1SR35-100AVL
	D151, D286, D501-D503		1SS254
	D541-D545, D621, D701		1SS254
	D703-D705, D731-D735		1SS254
	D761, D762, D771, D832-D835		1SS254
	D851-D856		1SS254
⚠	D807		MTZJ22A
⚠	D836		MTZJ3.6B
⚠	D808		MTZJ7.5B
	D702		MTZJ9.1A
		COILS AND FILTERS	
	L621		LFA121K
	L622		RTD1054
	L551, L552		RTF1094
	L101, L102		RTF1099
	F201, F202		RTF1208
		CAPACITORS	
	C115, C116		CCCCH181J50
	C117, C118		CCCCH221J50
	C175, C176		CCCSL221J50
	C351, C401, C551, C552, C564		CEAS010M50
	C107, C108, C771, C903		CEAS100M50
	C209		CCCSL101J50
	C121, C122, C207, C208		CEAS101M10

1.7 PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56 × 10^1 → 561 ····· RD1/8PM 5 6 1 J
47k Ω → 47 × 10^3 → 473 ····· RD1/4PS 4 7 3 J
0.5 Ω → 0R5 ····· RN2H 0 R 5 K
1 Ω → 010 ····· RS1P 0 1 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562 × 10^1 → 5621 ····· RN1/4PC 5 6 2 1 F

LIST OF WHOLE PCB ASSEMBLIES

Mark	PCB Assemblies	Part No.				Remarks
		CT-S630S/ HEM	CT-S630S/ HB	CT-S630S-G/ HEM	CT-S530/ HEM	
NSP	MOTHER UNIT	RWM1698	RWM1698	RWM1698	RWM1719	
	├MAIN UNIT	RWZ3221	RWZ3221	RWZ3221	RWZ3282	
	│ ├HX UNIT	RWX1069	RWX1069	RWX1069	RWX1069	
	│ ├1/F UNIT	RWX1092	RWX1092	RWX1092	RWX1086	
	│ └DOLBY S UNIT	RWX1101	RWX1101	RWX1101	Not used	
	├DISP UNIT	RWZ3222	RWZ3222	RWZ3222	RWZ3283	
	├OPSW UNIT	RWZ3223	RWZ3223	RWZ3223	RWZ3284	
NSP	├TRN 1 UNIT	RWZ3224	RWZ3224	RWZ3224	RWZ3285	
NSP	└TRN 2 UNIT	RWZ3225	RWZ3225	RWZ3225	RWZ3286	

MAIN UNIT

RWZ3221 and RWZ3282 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		RWZ3221	RWZ3282	
	IC201, IC251	CXA1563S	CXA1560S	
	IC341	BA15218N	Not used	
	Q284	DTA124ES	Not used	
	D286	1SS254	Not used	
	C343, C344	CEAS330M16	Not used	
	C209	CCCSL101J50	Not used	
	R261	RD1/6PM223J	Not used	
	R331, R332	RD1/6PM104J	Not used	
	R341 – R344	RD1/6PM152J	Not used	
	R710	RD1/6PM473J	Not used	
	C341, C342	CEAS470M16	Not used	

1/F UNIT

RWX1092 and RWX1086 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		RWX1092	RWX1086	
	R1115	RD1/6PM363J	RD1/6PM183J	

Mark	No.	Description	Part No.
	C559, C560, C953, C954		CEAS101M10
	C808		CEAS101M16
	C806, C810		CEAS101M50
	C809		CEAS102M6R3
	C833		CEAS220M16
	C803, C804		CEAS221M10
	C801, C802		CEAS222M16
	C173, C174, C253, C254		CEAS330M16
	C259, C260, C343, C344		CEAS330M16
	C555, C556, C628		CEAS330M16
	C503, C504		CEAS3R3M50
	C171, C172, C331, C332		CEAS470M16
	C341, C342, C522, C621, C702		CEAS470M16
	C721		CEAS470M16
	C201, C202, C553, C554, C831		CEAS4R7M50
	C834		CEAS4R7M50
	C203, C204, C255, C256		CEASR10M50
	C505, C506		CEASR47M50
	C557, C558		CFTXA102J50
	C405, C624, C625		CFTXA332J50
	C406, C626		CFTXA682J50
	C261, C262, C407		CFTYA103J50
	C623		CFTYA223J50
	C109, C110, C402		CFTYA273J50
	C105, C106, C403		CFTYA563J50
	C205, C206, C257, C258		CFTYA683J50
	C404		CFTYA823J50
	C501, C502		CGCYX473K25
	C507, C508		CKCYB122K50
	C541, C701, C703-C705, C722		CKCYF103Z50
	C761, C762, C851, C852, C905		CKCYF103Z50
	C921, C955		CKCYF103Z50
	C353, C815-C821, C853		CKCYF473Z50
	C941, C942		CKCYF473Z50
	C103, C104		CKPUYB101K50
	C113, C114		CKPUYB102K50
	C101, C102		CQPA271J100
	C627		CQPA682J100
	C805 (3300/35)		RCH1125
	C807 (3300/16)		RCH1126
RESISTORS			
	R714		RA10T223J
	R707		RA4T103J
	R701		RA4T683J
	R545		RA5T223J
	R709		RA9T683J
	R623, R624 (4.7Ω)		RCN1022
	R205, R206 (22K)		RCN1023
	R263, R264 (560Ω)		RCN1024
	R546 (11K)		RCX1020
	R611		RD1/2LMF010J
⚠	R801		RFA1/4L220J
	R905		RS2LMF560J
	VR401, VR402 (10K)		RCP1045
	VR551, VR552 (22K)		RCP1046
	VR101, VR102, VR403 (47K)		RCP1047
	VR191		RCS1028
	VR192		RCV1095
	Other Resistors		RD1/6PM□□□J
OTHERS			
	CN501 33P CONNECTOR		3-177644-3
	CN14 CONNECTOR POST		B2B-PH-K
	CN11 CONNECTOR POST		B4B-PH-K-E
	CN12 CONNECTOR POST		B4B-PH-K-R
	JA853 JACK		PKN1005
	JA351 4P JACK		RKB-020
	JA951 JACK		RKN1002
	JA851, JA852 JACK		RKN1004
	CN401 11P JUMPER CONNECTOR		SBRK11S
	PCB BINDER		VEF1008
	EARTH PLATE		VNF-091
	X701 CERAMIC RESONATOR (4.19MHz)		VSS1014
HX UNIT			
SEMICONDUCTORS			
	IC601		UPC1297CA
	Q602		2SA1309A
	Q603		DTC124ES
	D602		1SS254
COILS AND FILTERS			
	L601, L602 (4.6MH)		RTD1011
CAPACITORS			
	C609, C610		CCCSL101K500
	C616, C617		CEAS330M35
	C614		CEASR10M50
	C601, C602		CFTXA103J50
	C605, C606		CFTXA223J50
	C607, C608		CGCYX223K25
	C613		CKPUYB101K50
	C603, C604		CKPUYB821K50
	C611, C612 (390P/500)		RCG1004
RESISTORS			
	VR601, VR602		VRTB6HS473
	Other Resistors		RD1/6PM□□□J
1/F UNIT			
SEMICONDUCTORS			
	IC1111, IC1131		BA15218N
	Q1131-Q1136		DTC124ES
	D1111		1SS254
CAPACITORS			
	C1141-C1143		CEAS010M50
	C1117, C1118		CEAS101M10
	C1139, C1140		CEAS4R7M50
	C1119		CEASR47M50
	C1133, C1134		CGCYX152K25
	C1135, C1136		CGCYX272K25

Mark	No.	Description	Part No.
	C1115, C1116		CGCYX332K25
	C1120		CGCYX473K25
	C1137, C1138		CGCYX562K25
	C1111, C1112		CGCYX822K25
	C1113		CKPUYB101K50
RESISTORS			
	Other Resistors		RD1/6PM□□□J

DOLBY S UNIT

SEMICONDUCTORS			
	IC1001, IC1002		CXA1417Q-Q
CAPACITORS			
	C1003, C1004, C1015, C1016		CEJA010M50
	C1051, C1052		CEJA010M50
	C1089, C1090		CEJA100M25
	C1085, C1086		CEJA220M25
	C1029, C1030, C1035, C1036		CEJA470M16
	C1033, C1034		CEJAR10M50
	C1001, C1002, C1031, C1032		CEJAR22M50
	C1045, C1046, C1091, C1092		CEJAR22M50
	C1027, C1028, C1041, C1042		CEJAR47M50
	C1075, C1076		CEJAR47M50
	C1019, C1020		CFTYA224J50
	C1037, C1038		CFTYA334J50
	C1013, C1014, C1055, C1056		CKSQYB102K50
	C1007, C1008, C1025, C1026		CKSQYB104K25
	C1043, C1044, C1067, C1068		CKSQYB104K25
	C1077, C1078, C1081, C1082		CKSQYB104K25
	C1087, C1088		CKSQYB104K25
	C1023, C1024, C1049, C1050		CKSQYB153K50
	C1065, C1066, C1069-C1072		CKSQYB182K50
	C1083, C1084		CKSQYB182K50
	C1079, C1080		CKSQYB183K50
	C1059, C1060		CKSQYB222K50
	C1009, C1010, C1073, C1074		CKSQYB223K50
	C1093, C1094		CKSQYB333K50
	C1005, C1006, C1061, C1062		CKSQYB393K50
	C1063, C1064		CKSQYB471K50
	C1047, C1048		CKSQYB473K50
	C1011, C1012		CKSQYB681K50
	C1017, C1018, C1053, C1054		CKSQYB822K50
	C1021, C1022, C1039, C1040		CKSQYB823K25
RESISTORS			
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN1002 CONNECTOR 7P		6033B-07Z029
	CN1001 CONNECTOR 8P		6033B-08Z029

Mark	No.	Description	Part No.

DISP UNIT

SEMICONDUCTORS			
	Q1701		DTC124ES
	D1501-D1509, D1511-D1513		1SS254
	D1701		SEL6210S
SWITCHES AND RELAYS			
	S1506, S1507, S1701		RSG1030
	S1501-S1504		RSG1034
	S1509		RSH1041
CAPACITORS			
	C1501		CEAS470M16
RESISTORS			
	All Resistors		RD1/6PM□□□J
OTHERS			
	CN1501 33P CONNECTOR		3-177640-3
	V1501 FL INDICATOR TUBE		RAW1133

OPSW UNIT

SEMICONDUCTORS			
	Q1401, Q1402		DTC124ES
	D1401-D1404		1SS254
	D1409		SEL6410G
	D1408		SEL6C10R
SWITCHES AND RELAYS			
	S1401-S1411		RSG1030
CAPACITORS			
	C1401		CEAS100M50
RESISTORS			
	All Resistors		RD1/6PM□□□J

TRN 1 UNIT

This unit has no service parts.

TRN 2 UNIT

This unit has no service parts

PIONEER®
The Art of Entertainment

Service Manual

ORDER NO.
RRZ1084

The chapter 1 of this Service Manual will not be reprinted. On your additional orders, we may supply only the chapter 2. For the chapter 1, please make copies and attach to the chapter 2 at your side if necessary.

STEREO CASSETTE DECK

CT-S630S
CT-S630S-G
CT-S530

CHAPTER 2

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2.1 BLOCK DIAGRAM 2-2
2.2 EXPLODED VIEWS AND PACKING 2-3
2.3 PCB CONNECTION DIAGRAM 2-7
2.4 SCHEMATIC DIAGRAM 2-15

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
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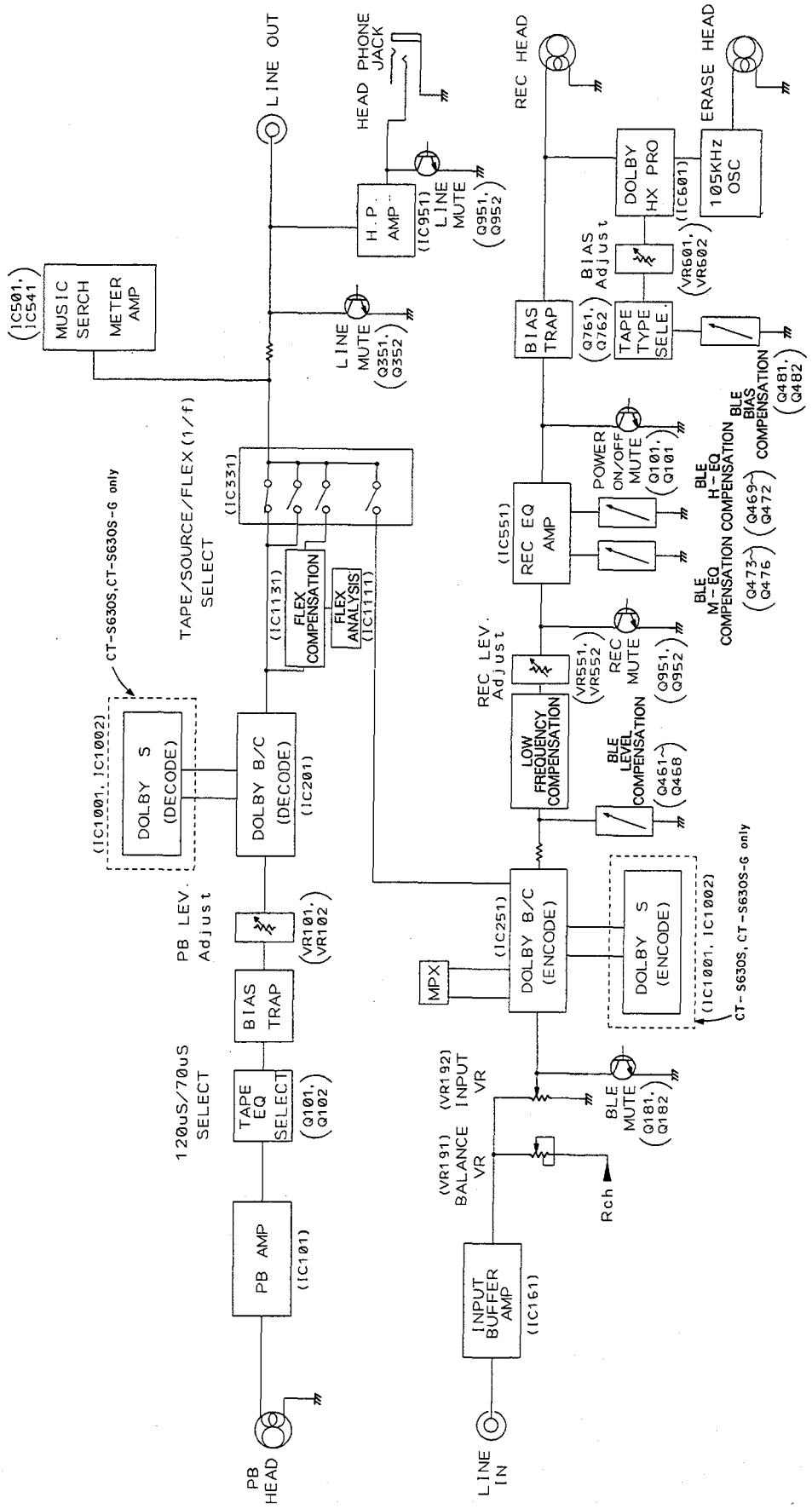
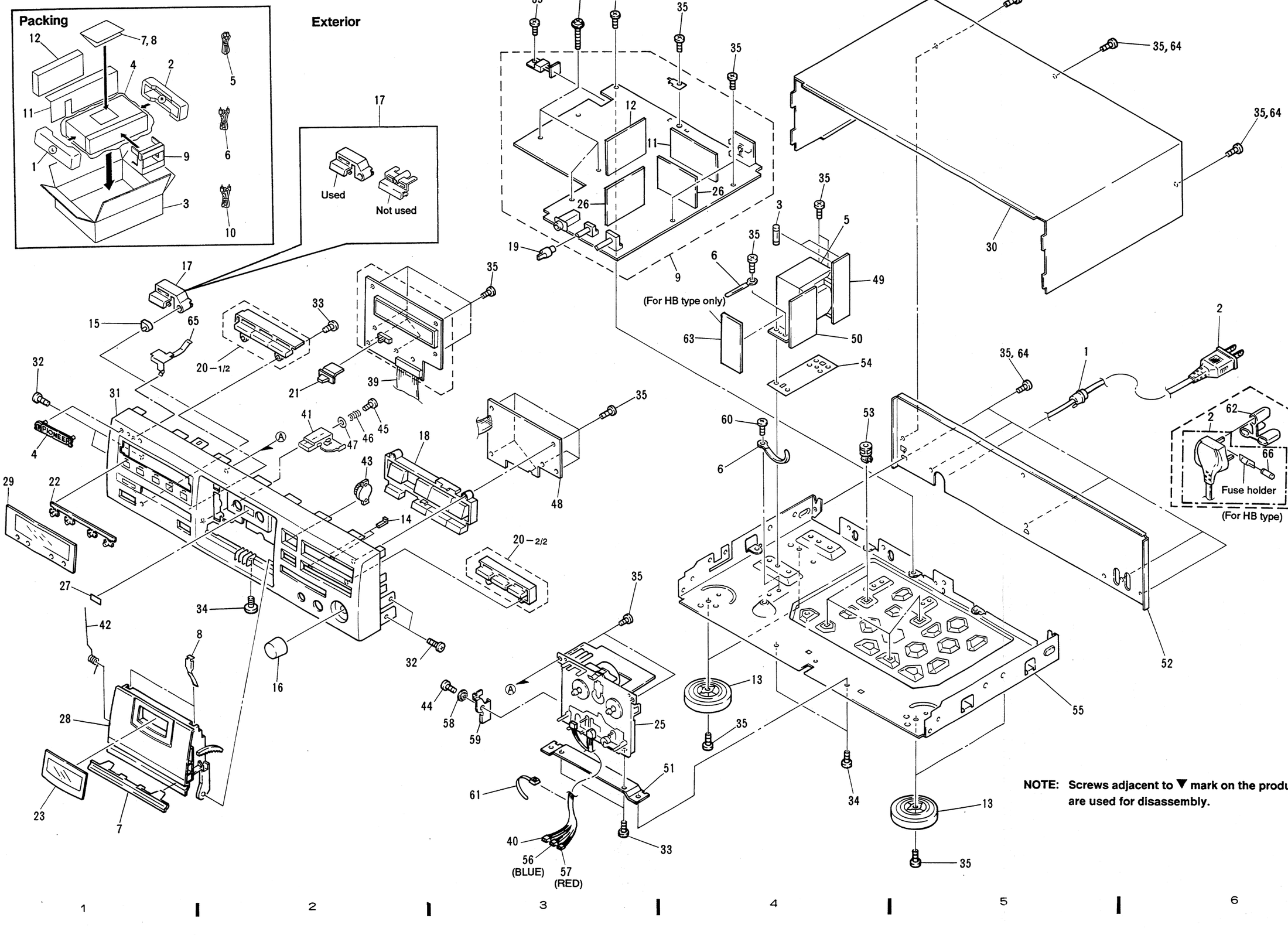
T – SSG MAR. 1994 Printed in Japan

2.1 BLOCK DIAGRAM



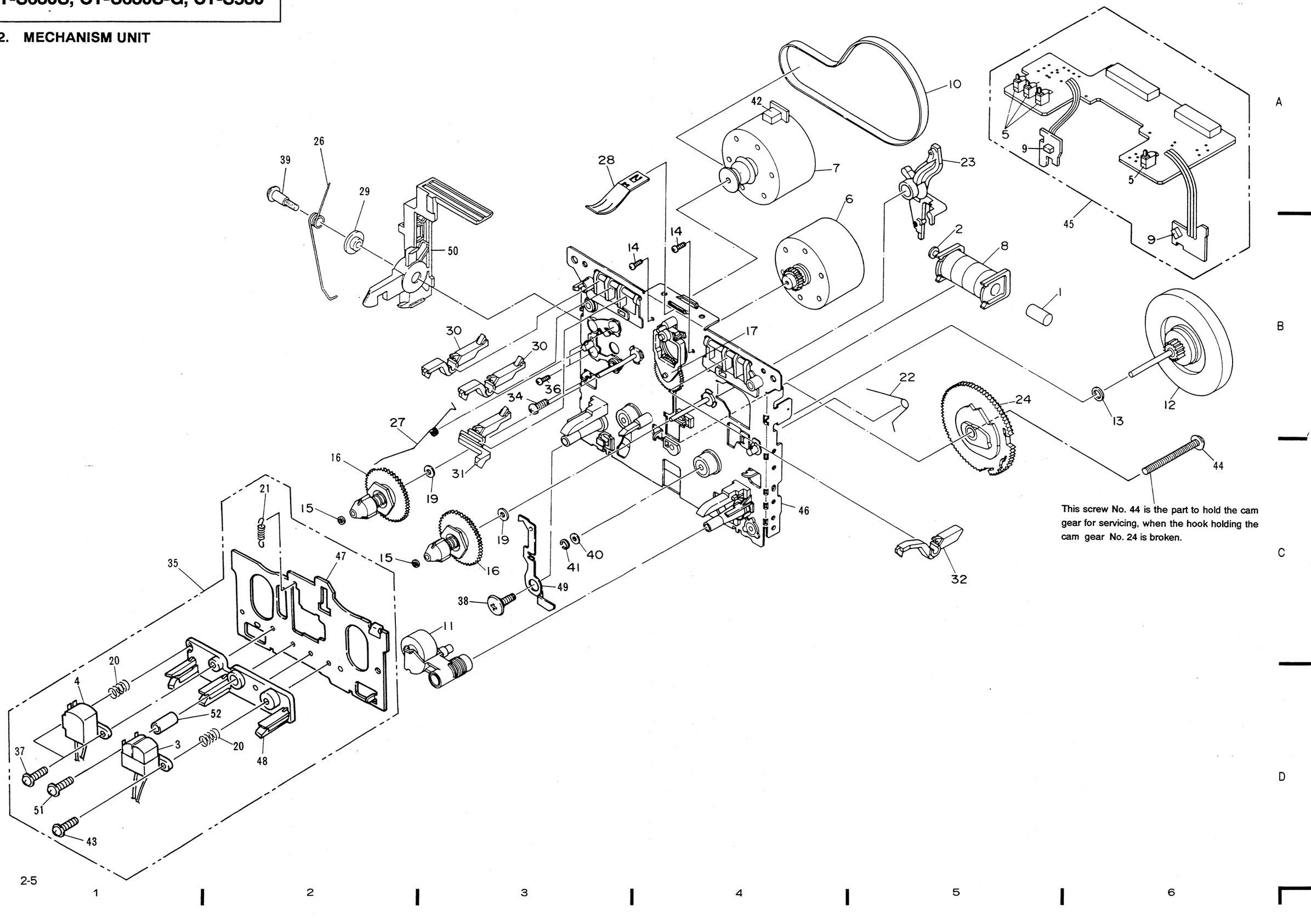
2.2 EXPLODED VIEWS AND PACKING

1. EXTERIOR AND PACKING



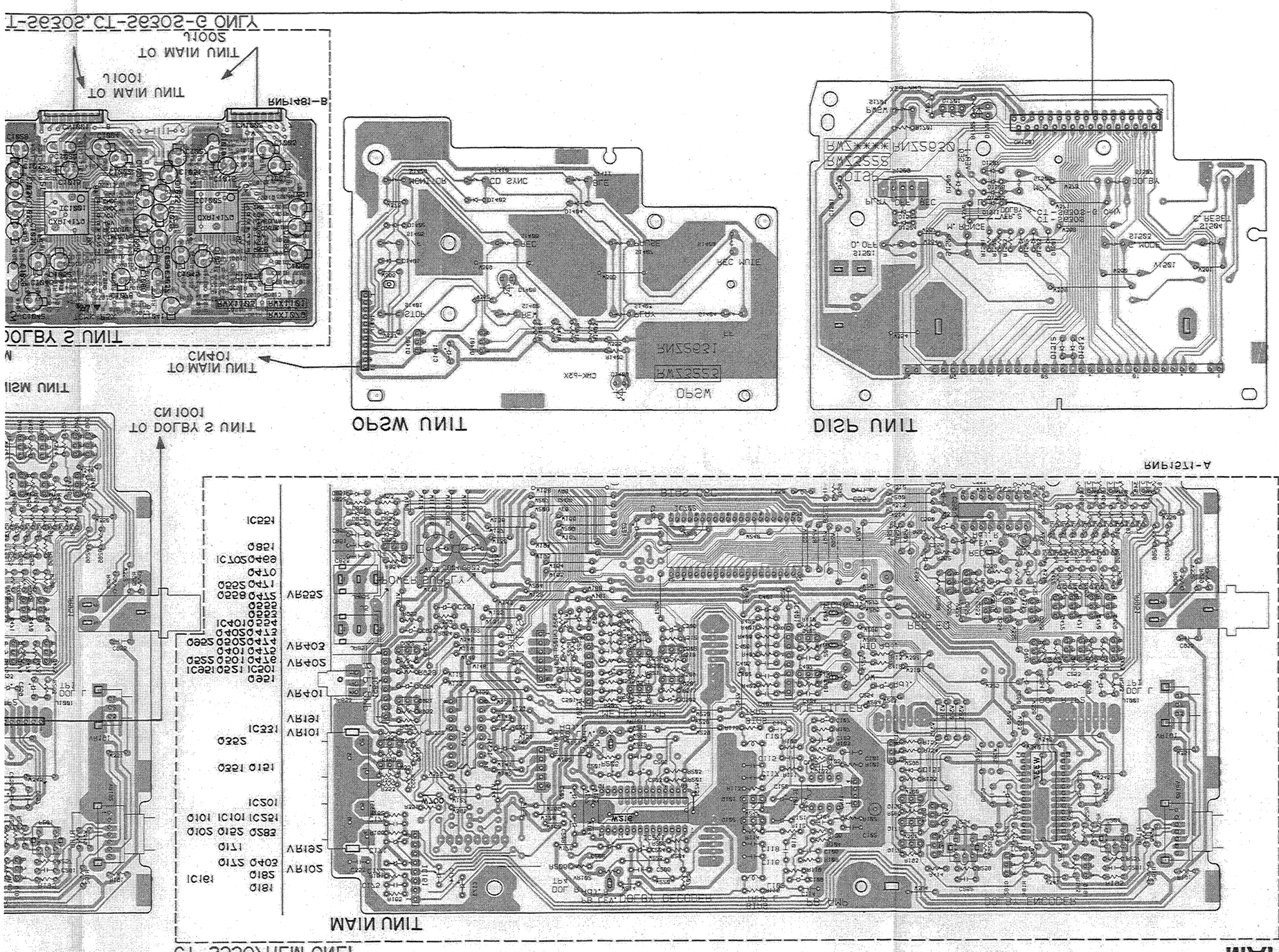
NOTE: Screws adjacent to ▼ mark on the product are used for disassembly.

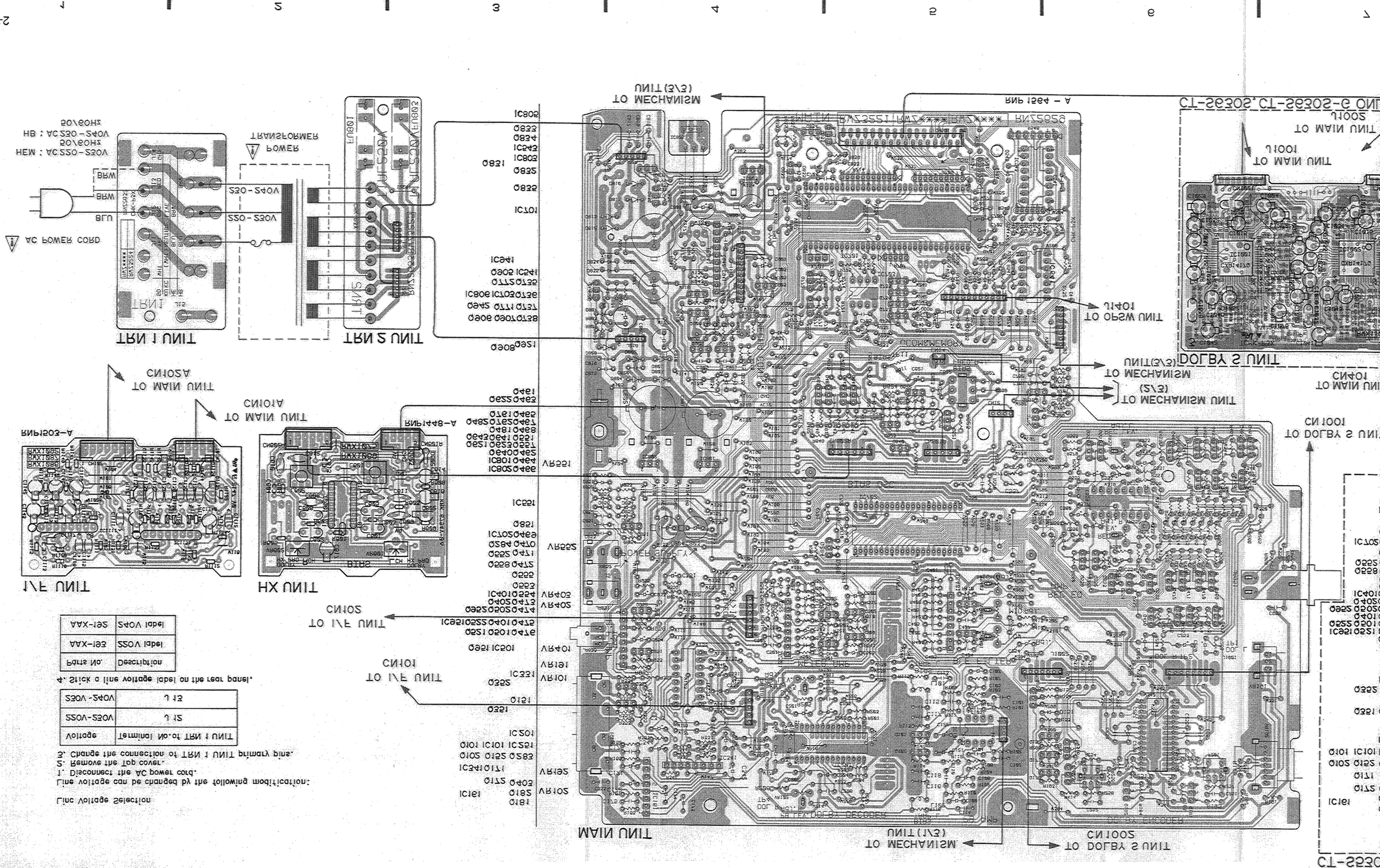
2. MECHANISM UNIT



This screw No. 44 is the part to hold the cam gear for servicing, when the hook holding the cam gear No. 24 is broken.

2.3 PCB CONNECTION DIAGRAM





CT-2230, CT-2230S, CT-2230S-C

• This diagram is viewed from the foil side.

CT-S630S, CT-S630S-G, CT-S530

- This diagram is viewed from the mounted parts side.

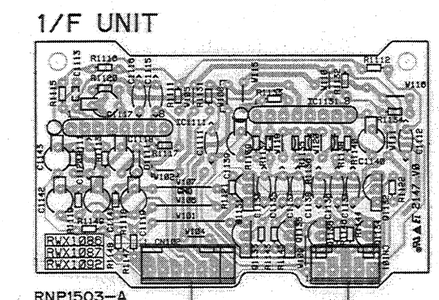
Linc Voltage Selection

Line voltage can be changed by the following modification:
1. Disconnect the AC power cord.
2. Remove the Top cover.
3. Change the connection of TRN 1 UNIT primary pins.

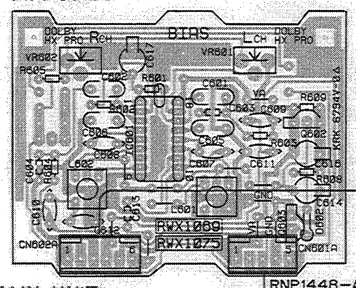
Voltage	Terminal No.of TRN 1 UNIT
220V-230V	J 12
230V -240V	J 13

4. Stick a line voltage label on the rear panel.

Parts No.	Description
AAX-193	220V label
AAX-192	240V label



1/F UNIT



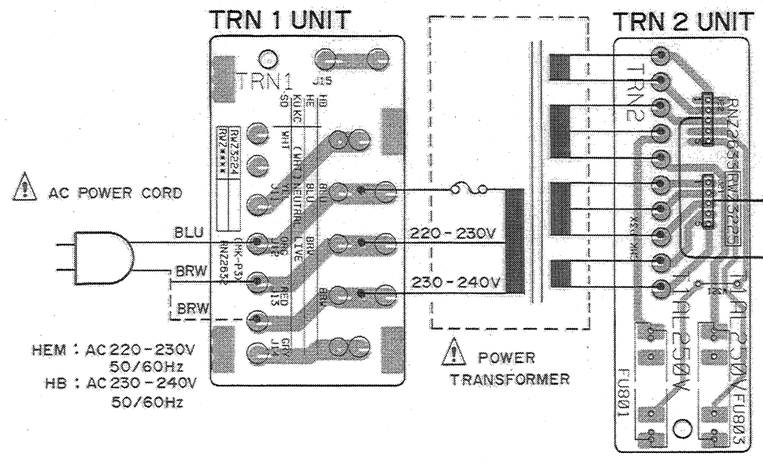
HX UNIT

TO MAIN UNIT CN101A

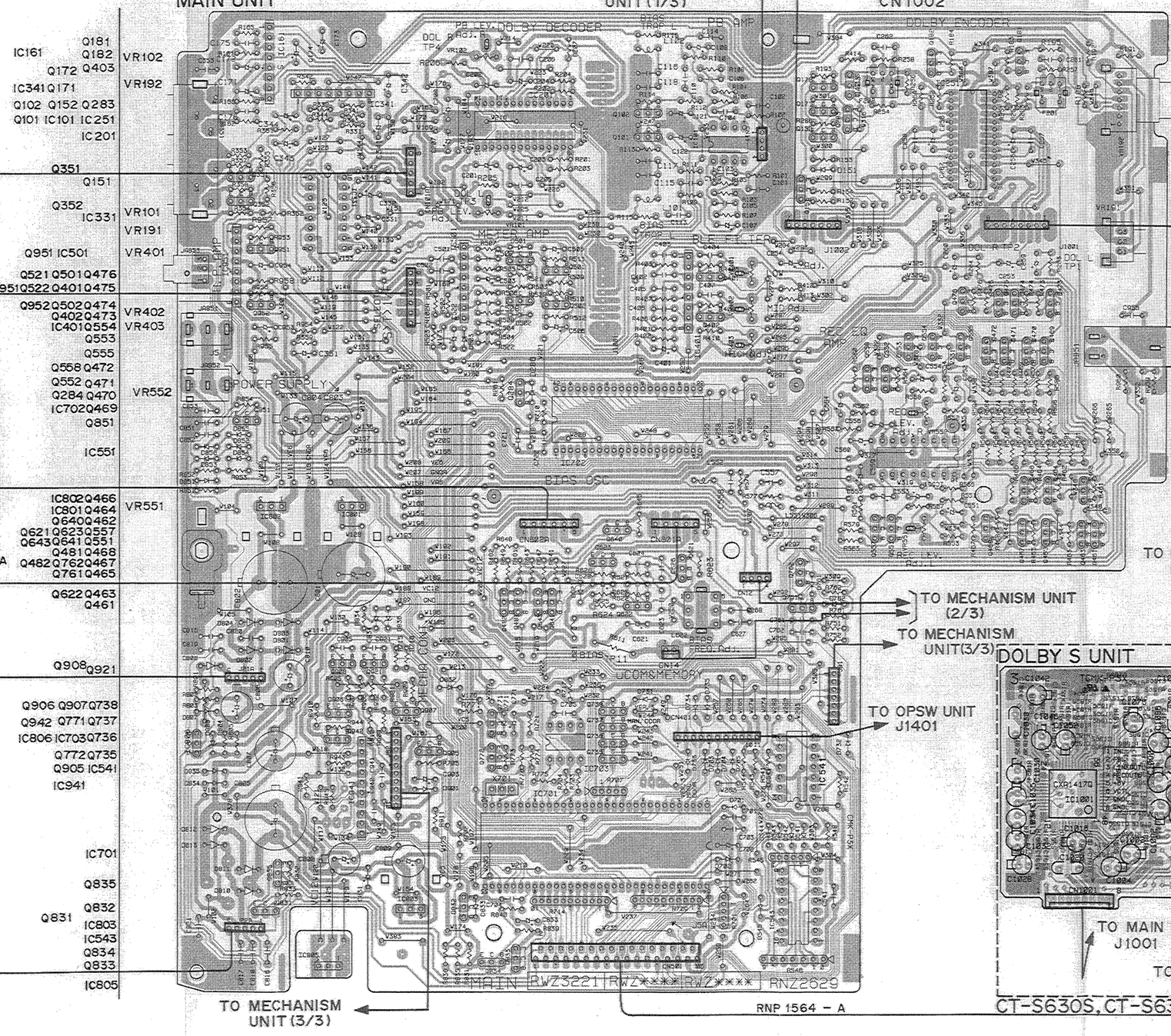
TO MAIN UNIT CN102A

TRN 1 UNIT

TRN 2 UNIT

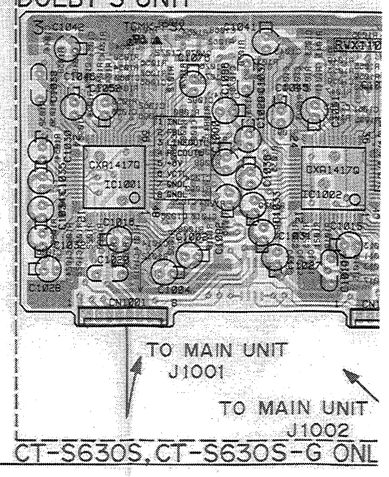


MAIN UNIT



CT-S530

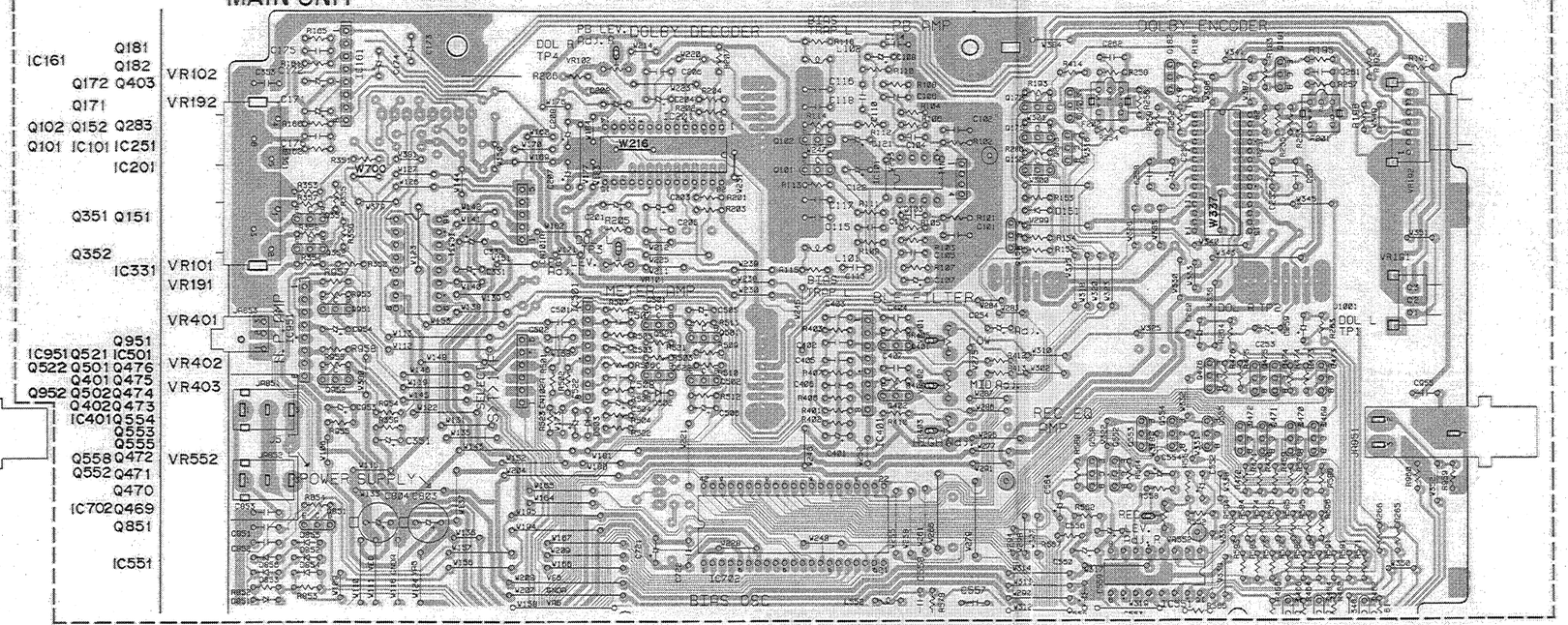
DOLBY S UNIT



CT-S630S, CT-S630S-G ONL

CT-S530/HEM ONLY

MAIN UNIT

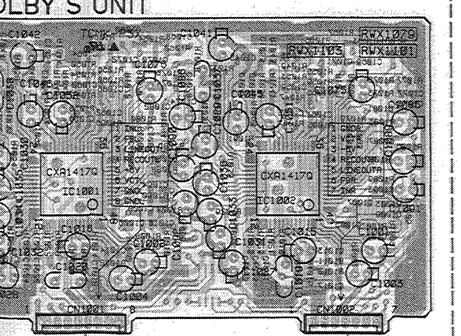


TO DOLBY S UNIT
CN1001

SM UNIT

TO MAIN UNIT
CN401

OLBY S UNIT

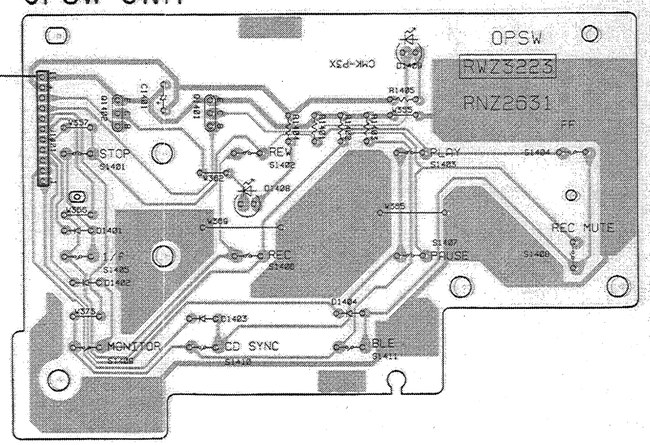


TO MAIN UNIT
J1001

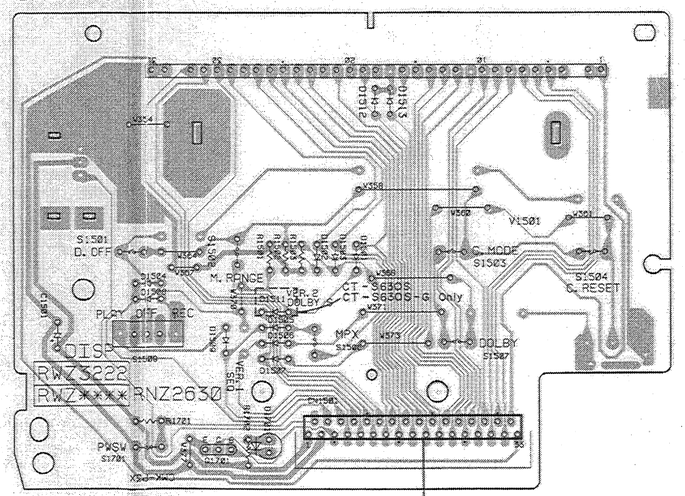
TO MAIN UNIT
J1002

T-S630S, CT-S630S-G ONLY

OPSW UNIT



DISP UNIT



NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
Q504 E Q504	Q504 Q504	Transistor
D203 D203	D203	Diode
C513 C513	C513	Capacitor (Polarized)

3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊐ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

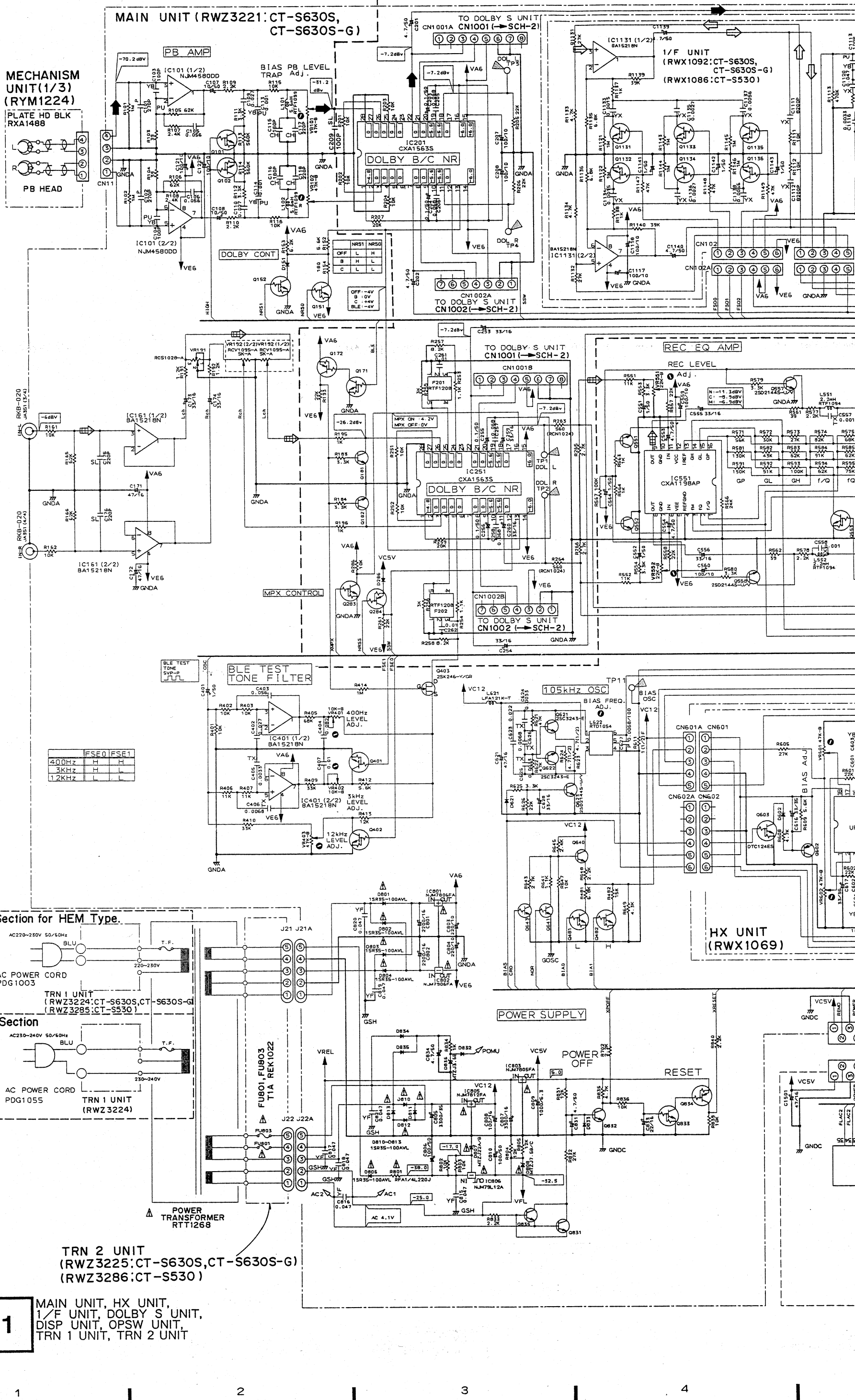
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3- terminal regulator

2.4 SCHEMATIC DIAGRAM

Refer to SCH-3 for the circuit diagram for this CT-S530 part.



	FSE0	FSE1
400Hz	H	H
3KHz	H	L
12KHz	L	L

SCH—1 MAIN UNIT, HX UNIT, 1/F UNIT, DOLBY S UNIT, DISP UNIT, OPSW UNIT, TRN 1 UNIT, TRN 2 UNIT

uit diagram for this CT-S530 part.

1/F UNIT
(RWX1092:CT-S630S, CT-S630S-G)
(RWX1086:CT-S530)

REC EQ AMP

MECHANISM UNIT
(2/3)
(RYM1224)

PLATE HD BLK
RXA1488

TAPE SELECT

HP AMP

MS AMP
METER AMP

TAPE/SOURCE/ 1/f

MODE	B	A
TAPE	H	H
SOURCE	H	L
1/f	L	H
GND	L	L

BLE CONT

MEMORY

HX UNIT
(RWX1069)

105kHz OSC

OPSW UNIT(PWZ3223:CT-
CT-
(PWZ3284:CT-

POWER SUPPLY

POWER OFF

RESET

DISP UNIT(PWZ3222:CT-S630S,CT-S630S-G)
(PWZ3283:CT-S530)

SIGNAL ROUTE
➡ : PLAYBACK SIGNAL
⇨ : PLAYBACK (FLEX) SIGNAL
⇨ : RECORDING SIGNAL

SCH-1

MECHA CONTROL

HP AMP

MS AMP
METER AMP

TAPE/SOURCE/ 1/f

MECHANISM UNIT (2/3) (RYM1224)

MECHANISM UNIT (3/3) (RYM1224)

TAPE SELECT

BLE CONT

MEMORY

PCB CONTROL BLK RXA1487

PLATE HD BLK RXA1488

SR REMOCON

CD SYNCHRO

SPI33534FG

SPI33534FG

RXM1057

RXP1010

RXM1058

Diodes, transistors and tact switces not indicated are as follows.

2SC3311A-R/S

2SA1309A-R/S

DTC124ES

DTA124ES

DTC124TS

DTA124TS

1SS254

S1401 to S1411, S1506 and S1507 are RSG1030

S1501 to S1504 are RSG1034

The schematic diagram of the DOLBY S UNIT (RWX1101) is A3-RS16902A.

OPSW UNIT (PWZ3223: CT-S630S, CT-S630S-G) (PWZ3284: CT-S530)

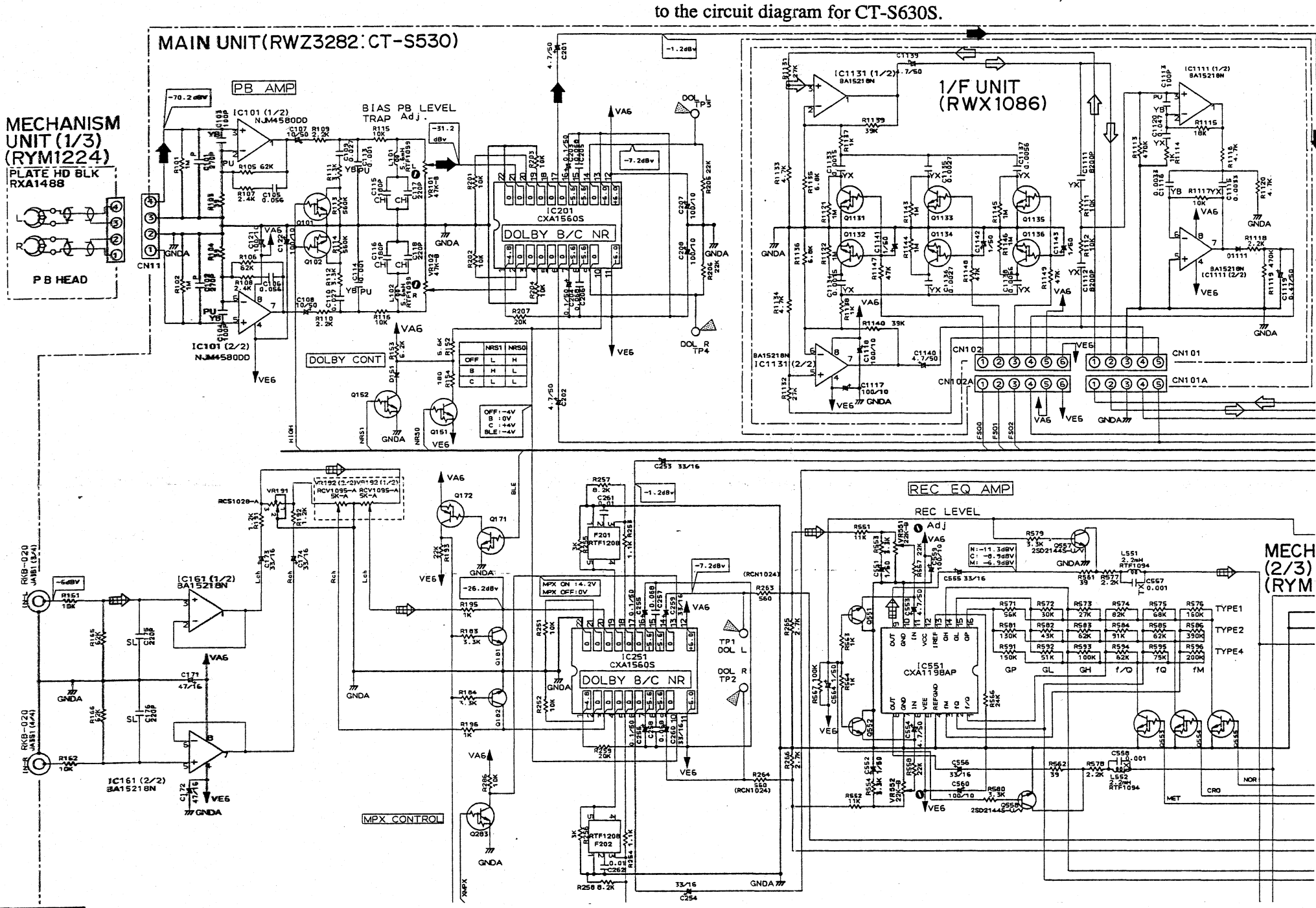
DISP UNIT (PWZ3222: CT-S630S, CT-S630S-G) (PWZ3283: CT-S530)

SIGNAL ROUTE
➡ : PLAYBACK SIGNAL
⇨ : PLAYBACK (FLEX) SIGNAL
⇨ : RECORDING SIGNAL

MAIN UNIT, HX UNIT, 1/F UNIT, DOLBY S UNIT, DISP UNIT, OPSW UNIT, TRN 1 UNIT, TRN 2 UNIT

SCH-1

Note: This circuit diagram shows the differences between CT-S630S and CT-S530. For other details, refer to the circuit diagram for CT-S630S.



SCH—3 MAIN UNIT

NOTE FOR SCHEMATIC DIAGRAMS (Type 6A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭ or ⊷ V :
   DC voltage (V) in STOP mode unless otherwise noted.
   ⇦ mA or ⊷ mA :
   DC current in STOP mode unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - ◁ : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH—□ ON THE SCHEMATIC DIAGRAM:**
   - SCH—□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

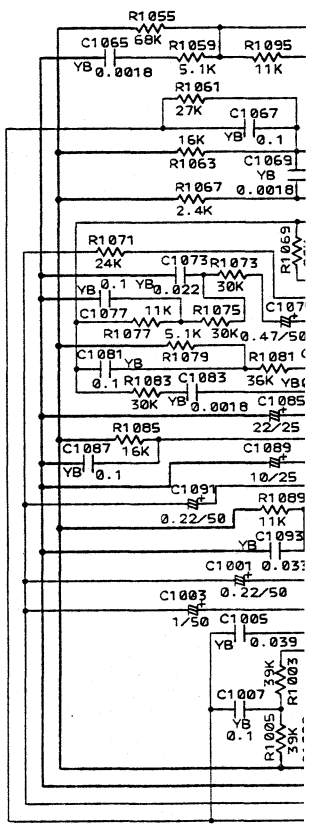
9. **SWITCHES** (Underline indicates switch position):

OPSW UNIT
S1401 : ■STOP
S1402 : ◀◀REW
S1403 : ▶PLAY
S1404 : ▶▶FF
S1405 : FLEX (I/f)
S1406 : REC
S1407 : ▮▮PAUSE
S1408 : REC MUTE
S1409 : MONITOR
S1410 : CD SYNCHRO
S1411 : AUTO BLE

DISP UNIT
S1501 : DISP OFF
S1502 : METER RANGE
S1503 : COUNTER MODE
S1504 : COUNTER RESET
S1506 : MPX FILTER
S1507 : DOLBY NR
S1509 : TIMER (REC – OFF – PLAY)

S1701 : POWER

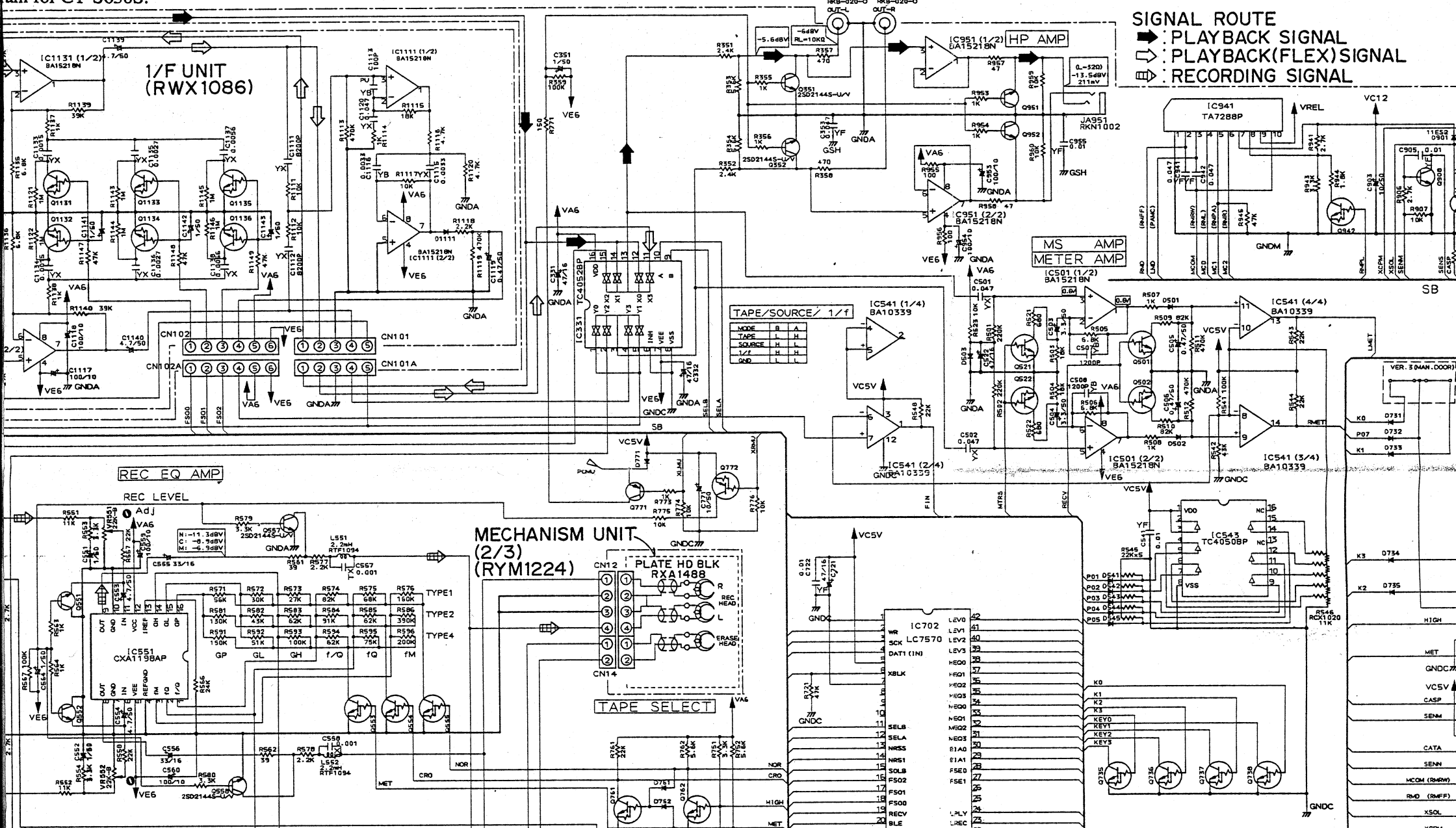
DOLBY S UNIT (RWX1
(CT-S630S, CT-S630S-

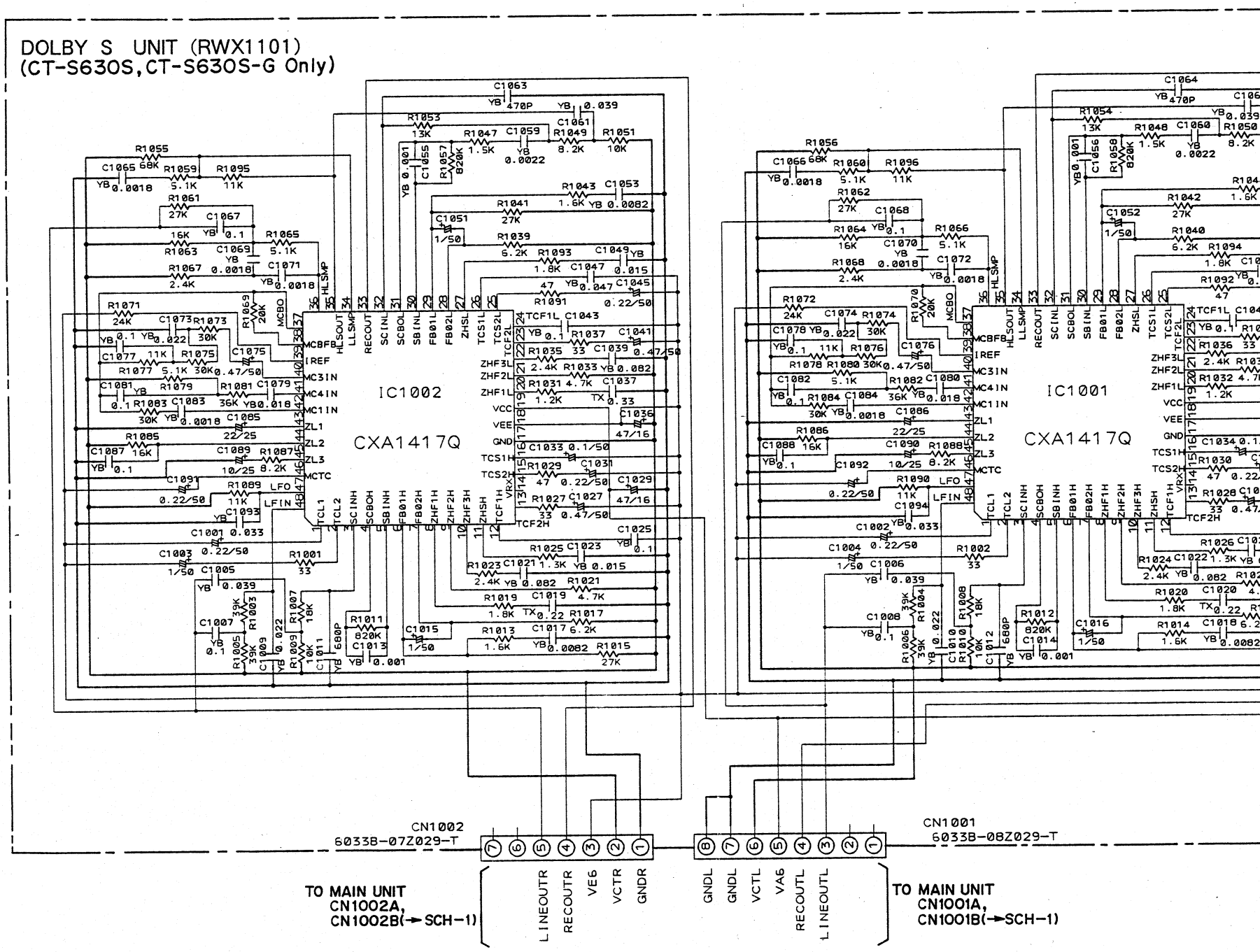


SCH—2 DOLBY S UNIT

m shows the differences
S and CT-S530. For other details, refer
ram for CT-S630S.

switch position):





SIGNAL ROUTE
➡ : PLAYBACK SIGNAL
⇨ : PLAYBACK(FLEX) SIGNAL
⇶ : RECORDING SIGNAL

SCH-3

HP AMP
MS AMP
METER AMP
MECHA CONTROL
TAPE/SOURCE/ 1/f
TAPE SELECT
MEMORY

MODE	MC0	MC1	MC2
PLAY	H	L	H
OPEN	L	H	H
CLOSE	L	H	H
FF	H	L	H
REW	H	L	L

MODE	A	B
TAPE	L	H
SOURCE	H	H
1/f	H	L
GND	L	L

MECHANISM UNIT
(3/3)
(RYM1224)
RSG1018

Diodes, transistors and tact switches not indicated are as follows.

PCB CONTROL BLK
RXA1487
SPI33534FG
SPI33534FG
RXM1057
RXP1010

MAIN UNIT SCH-3

SCH-2

CN1002
6033B-07Z029-T
TO MAIN UNIT
CN1002A,
CN1002B(→SCH-1)
LINEOUTR
RECOUTR
VE6
VCTR
GNDR

CN1001
6033B-08Z029-T
TO MAIN UNIT
CN1001A,
CN1001B(→SCH-1)
GNDL
GNDL
VCTL
VA6
RECOUTL
LINEOUTL

MAIN UNIT SCH-2